

REMARKS

The Official Action mailed June 30, 2003, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on July 20, 2001, August 27, 2001, February 19, 2002, September 20, 2002, and April 17, 2003.

Claims 1-32 were pending in the present application prior to the above amendment. Claims 33-56 have been added to recite additional protection to which the Applicants are entitled. Accordingly, claims 1-56 are now pending in the present application, of which claims 1-24 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1-6, 13-20, 25-27 and 30-32 as anticipated by U.S. Patent No. 5,529,937 to Zhang et al. The Applicants respectfully traverse the rejection because the Official Action has not established an anticipation rejection.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present invention. Zhang does not teach all the elements of the independent claims, either explicitly or inherently. Specifically, Zhang does not teach leveling a surface of a semiconductor film by heating after removing an oxide film. Zhang appears to teach that a heating step is conducted in an atmosphere containing hydrogen (see Fig. 6E, and column 17, lines 12-17). The heating of Zhang is conducted after patterning a semiconductor film 404, not after

removing an oxide film. Therefore, Zhang does not teach leveling a surface of a semiconductor film by heating after removing an oxide film.

Since Zhang does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) are in order and respectfully requested.

The Official Action rejects claims 21-24 as obvious based on the combination of Zhang and U.S. Patent No. 5,891,764 to Ishihara et al., and claims 7-12, 28 and 29 as obvious based on the combination of Zhang and Wolf et al., "Silicon Processing for the VLSI Era: Volume 1: Process Technology," pages 198, 532-533, Lattice Press, 1986. The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Ishihara and Wolf do not cure the deficiencies in Zhang. The Official Action relies on Ishihara to allegedly teach "a rectangle shaped laser beam" (page 3, Paper No. 9), and on Wolf to allegedly teach that "it is common to remove silicon oxide using hydrofluoric acid" (page 4, Id.). Zhang, Ishihara and Wolf, either alone or in combination, do not teach or suggest leveling a surface of a semiconductor film by heating after removing an oxide film. Since Zhang, Ishihara and Wolf do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are in order and respectfully requested.

New claims 35-56 have been added to further distinguish the present invention from the prior art of record. Specifically, claims 35-56 recite that a semiconductor film is patterned after leveling a surface of the semiconductor film. Zhang, Ishihara and Wolf, either alone or in combination, do not teach or suggest that a semiconductor film is patterned after leveling a surface of the semiconductor film. Therefore, the Applicants respectfully submit that claims 35-56 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789